

Non-contact Infrared Temperature Measurement System — NCIT Plus Series

Measurement Specifications

Temperature Range (All Sensor Heads):	0 to 1000°F (-18 to 538°C)
Spectral Response:	Standard & Laser: 8 to 14 μm
Optical Resolution:	Laser: 50:1, close focus 45:1 Standard: 35:1, close focus 30:1
System Accuracy:	$\pm 1\%$ or $\pm 2^\circ\text{F}$ ($\pm 1^\circ\text{C}$), whichever is greater
System Repeatability:	$\pm 0.5\%$ or $\pm 2^\circ\text{F}$ ($\pm 1^\circ\text{C}$), whichever is greater
Response Time – (95% of final reading):	Standard & Laser: 500 ms
Emissivity:	Digitally adjustable, 0.1 to 1.09 by increments of 0.01 steps
Signal Processing:	Peak and valley hold (up to 998 sec, 999 = infinite hold with external reset), Variable averaging filter (up to 60 sec), T-ambient: fixed background ambient temperature compensation

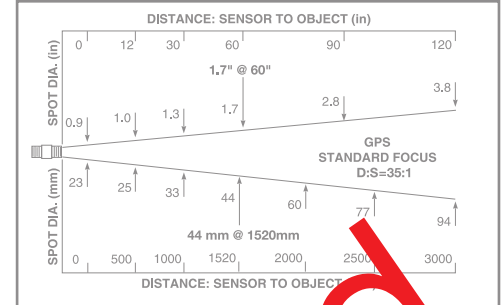
Electrical Specifications

Power Supply:	110 / 220 VAC, $\pm 20\%$, 50-60 Hz
Inputs:	User configurable inputs for Laser or Standard sensing heads, any 5-0 Vdc or 4-20 mA sensor, or thermocouple (J, K, E, N, R, S, T) External reset input to reset peak/valley hold
Outputs-Signal:	4-digit, LED display, 1°C selectable. User configurable 4-20 mA current or thermocouple output (J, K, E, N, R, S, T)
Alarm Output:	Two adjustable setpoints with deadbands control 5 Vdc alarm outputs or optional 30 mechanical relays
DC Supply Output:	24 Vdc / 50 mA excitation voltage for powering external sensors

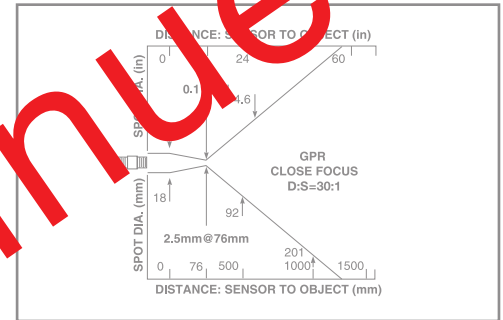
Sensor Specifications

Environmental Rating:	Monitor Front Panel: NEMA 12 (IP54) Laser/Standard Head: NEMA 12 (IP65)
Ambient Temperature:	
Monitor	32° to 120°F (0 to 50°C)
Laser/Standard Head	32° to 150°F (0 to 65°C) laser shuts off automatically at 120°F (50°C)
With water cooling	32° to 350°F (0 to 177°C)
With air cooling	32° to 250°F (0 to 120°C)
Relative Humidity:	10 to 95%, non-condensing
Monitor Dimensions:	1/8 DIN, 96 × 48 × 120 mm 1.9" × 3.78" × 4.75"
Cutout Dimensions:	1.75" × 3.63" (92 × 44 mm)
Weight:	Monitor: 320g (0.7 lb.)

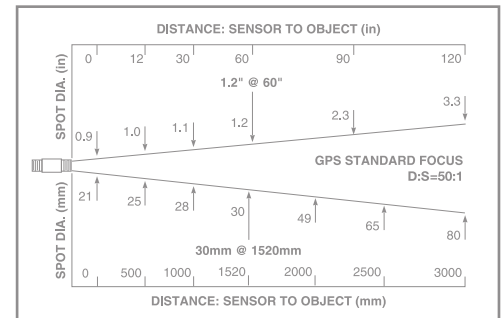
Distance to Spot Ratio-Standard



Distance to Spot Ratio-Standard Close Focus



Distance to Spot Ratio-Laser



Distance to Spot Ratio-Laser Close Focus

